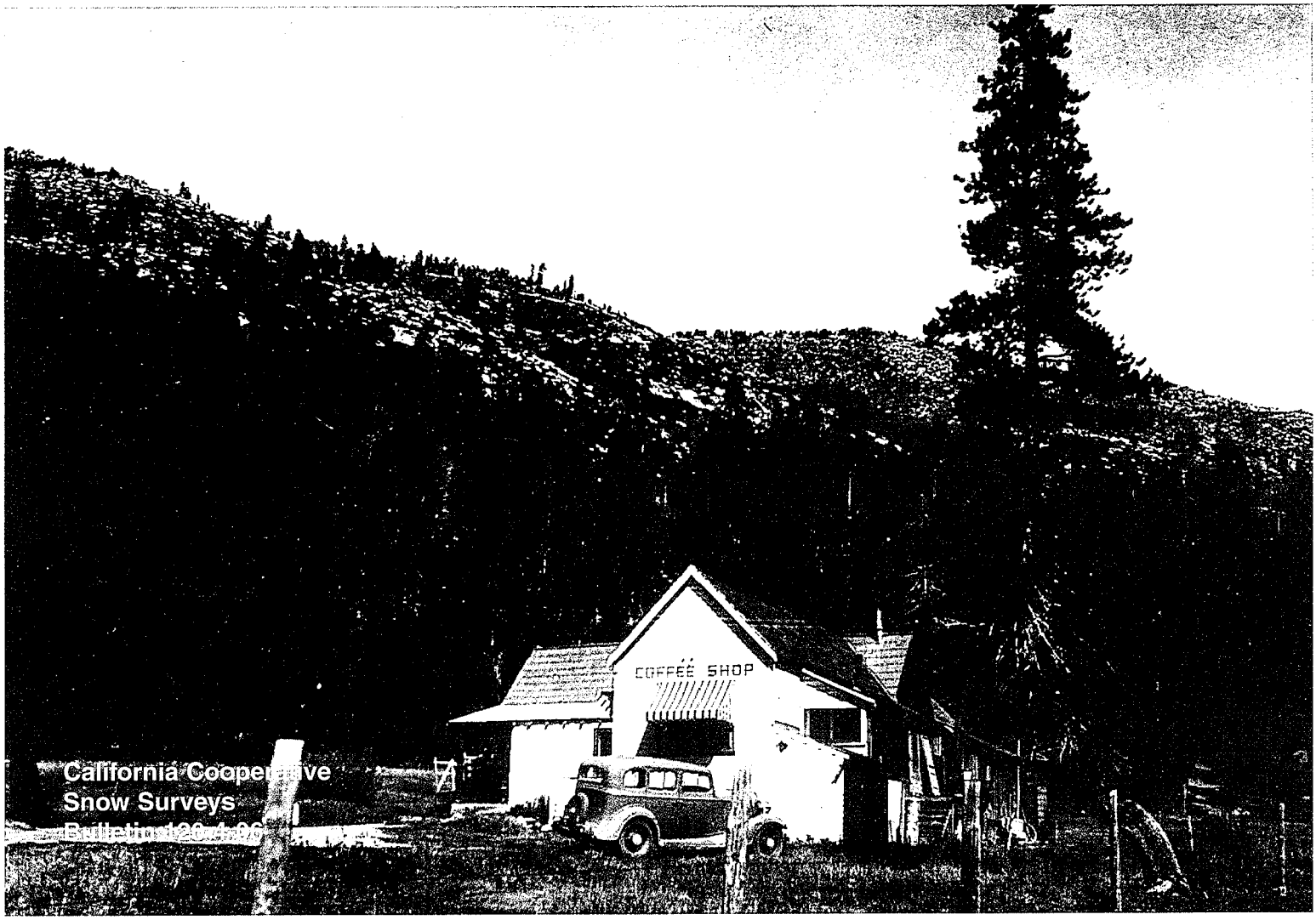

California Cooperative
Snow Surveys
Bulletin 120-4-06

State of California
The Resources Agency

Department of
Water Resources

Water Conditions in California

Report 4 May 1, 2006

Arnold Schwarzenegger
Governor
State of California

Mike Chrisman
Secretary for Resources
The Resources Agency

Lester A. Snow
Director
Department of Water Resources

STATE OF CALIFORNIA
Arnold Schwarzenegger, Governor

THE RESOURCES AGENCY
Mike Chrisman, Secretary for Resources

Department of Water Resources
Lester A. Snow
Director

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COOPERATING AGENCIES

Public Agencies
Buena Vista Water Storage District
East Bay Municipal Utility District
Eldorado Irrigation District
Friant Water Users Association
Kaweah Delta Water Conservation District
Kern Delta Water District
Kings River Conservation District
Lower Tule River Irrigation District
Merced Irrigation District
Modesto Irrigation District
Nevada Irrigation District
North Kern Water Storage District
Northern California Power Agency
Oakdale Irrigation District
Omochumne-Hartnell Water District
Oroville-Wyandotte Irrigation District
Placer County Water Agency
Sacramento Municipal Utility District
San Joaquin Exchange Contractors Water Association
South San Joaquin Irrigation District
Tri-Dam Project
Truckee River Basin Water Commission
Tulare Lake Basin Water Storage District
Turlock Irrigation District
Yuba County Water Agency

Private Organizations
J.G. Boswell Company
Kaweah and St. Johns River Association
Kings River Water Association
Tule River Association
State Water Project Contractors

Municipalities
City of Bakersfield Water Department
City of Los Angeles Department of Water and Power
City and County of San Francisco Hetch Hetchy Water and Power

State Agencies
University of California
  Central Sierra Snow Laboratory
  Scripps Institution of Oceanography
California Department of Forestry & Fire Protection
California Department of Water Resources

Public Utilities
Pacific Gas and Electric Company
Southern California Edison Company

Federal Agencies
U.S. Department of Agriculture
  Forest Service(14 National Forests)
  Natural Resource Conservation Service
U.S. Department of Commerce
  National Weather Service
U.S. Department of Interior
  Bureau of Reclamation
  Geological Survey, Water Resources
  National Park Service(3 National Parks)
U.S. Department of Army
  Corps of Engineers

Other Cooperative Programs
Nevada Cooperative Snow Surveys
Oregon Cooperative Snow Surveys

SUMMARY OF WATER CONDITIONS

May 1, 2006

April continued the cool and wet pattern which began in March with about three times average precipitation in many watersheds. Instead of melting, the snowpack actually increased about 20 percent. Most rivers in northern and central California ran high during April with some flooding. Water supplies for the year are ample; the problem for many is how to handle the excess.

Forecasts of April through July runoff are 180 percent of average, which would make 2006 the 9th wettest runoff year in the record. Forecasts of water year runoff are also very high at about 165 percent of average.

Snowpack water content on May 1 is about 185 percent of average for the date and 145 percent of the April 1 average, which is the normal date of maximum accumulation. Last year the snowpack on May 1 was 150 percent of average.

Precipitation from October through April was about 140 percent of average compared to 135 percent one year ago. The range is from nearly 50 percent in the dry Colorado River region to over 150 percent in several northern California regions. April statewide precipitation was 250 percent of average.

Runoff has been about 170 percent of average so far this season compared to 80 percent last year. Runoff during April was 240 percent of average. Estimated runoff of the 8 major rivers of the Sacramento and San Joaquin River regions was 8.5 million acre-feet during April.

Reservoir storage continues to be excellent at about 115 percent of average compared to 105 percent last year. About 85 percent of total capacity was being used on May 1 with most of the leftover space anticipated to fill during the snowmelt season.

SUMMARY OF WATER CONDITIONS
IN PERCENT OF AVERAGE

HYDROLOGIC REGION	PRECIPITATION OCTOBER 1 TO DATE	MAY 1 SNOW WATER CONTENT	MAY 1 RESERVOIR STORAGE	RUNOFF OCTOBER 1 TO DATE	APR-JULY RUNOFF FORECAST	WATER YEAR RUNOFF FORECAST
NORTH COAST	155	240	115	170	175	170
SAN FRANCISCO BAY	165	--	115	185	--	--
CENTRAL COAST	125	--	135	130	--	--
SOUTH COAST	70	--	105	110	--	--
SACRAMENTO RIVER	160	180	110	175	190	165
SAN JOAQUIN RIVER	145	185	125	175	180	170
TULARE LAKE	130	180	145	130	165	150
NORTH LAHONTAN	155	170	135	175	170	175
SOUTH LAHONTAN	105	180	110	100	140	125
COLORADO RIVER-DESERT	45	--	--	--	--	--
STATEWIDE	140	185	115	170	180	165

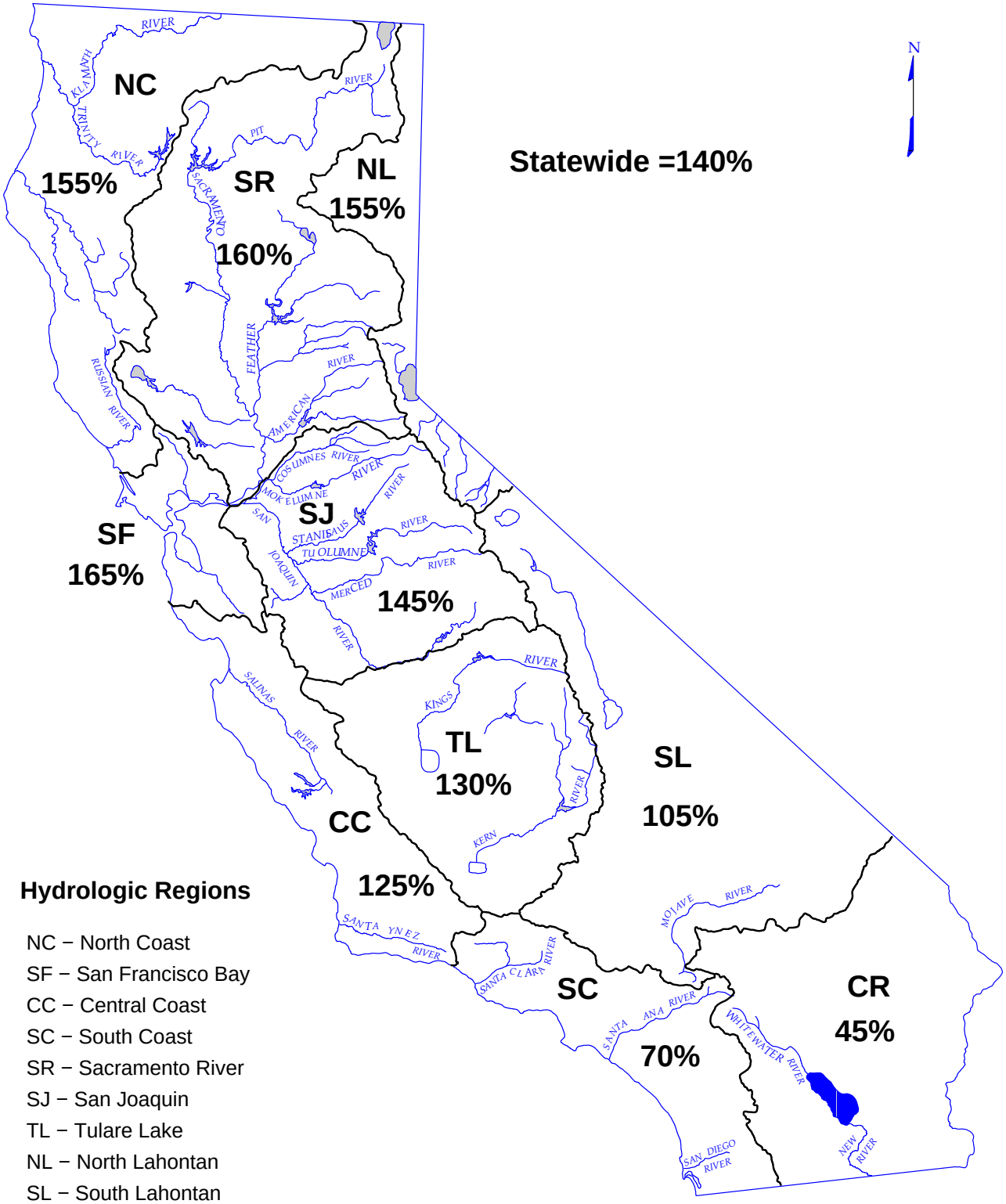
DEPARTMENT OF WATER RESOURCES

CALIFORNIA COOPERATIVE SNOW SURVEYS

SEASONAL PRECIPITATION

IN PERCENT OF AVERAGE TO DATE

October 1, 2005 through April 30, 2006

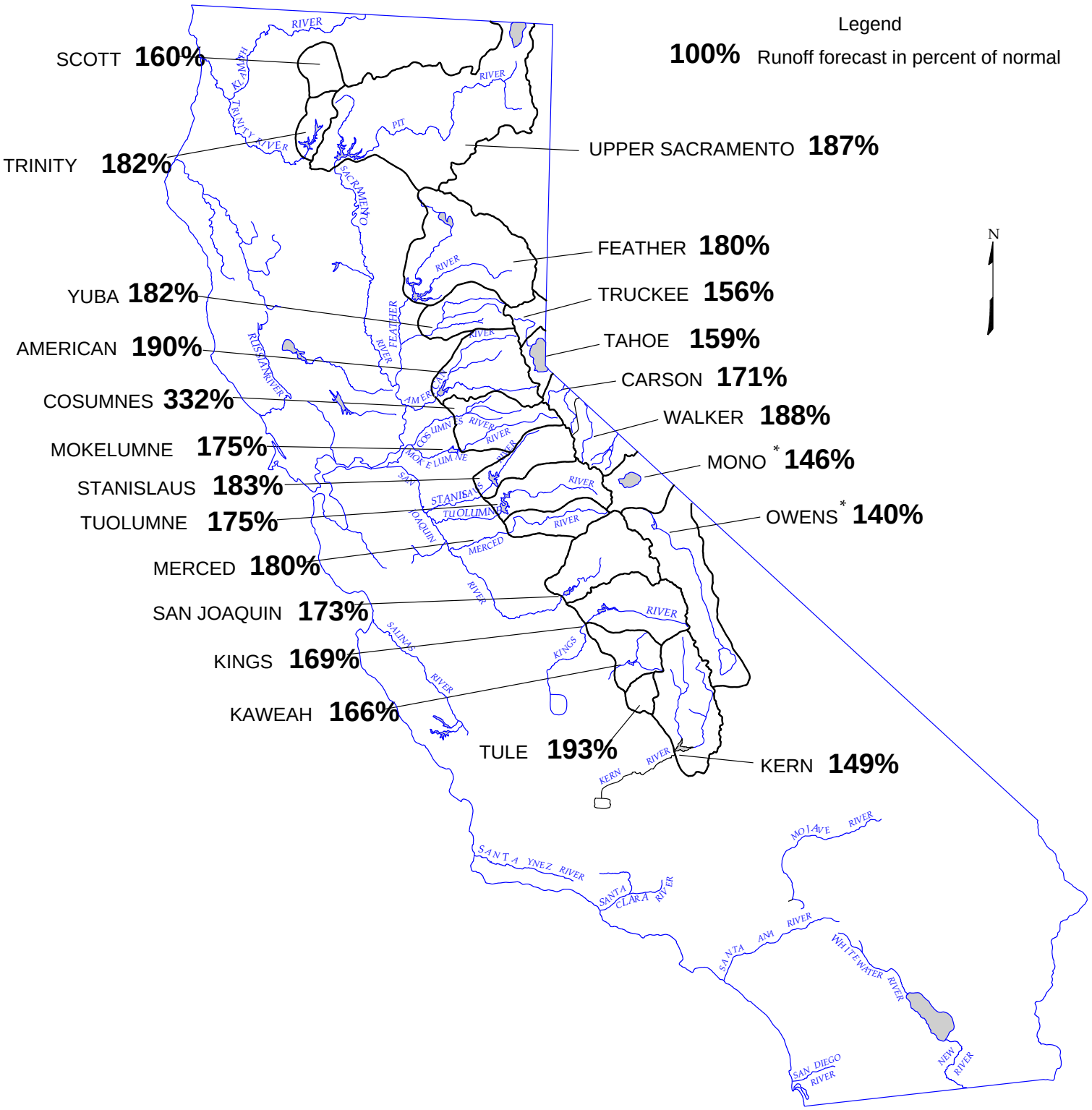


Hydrologic Regions

NC − North Coast
SF − San Francisco Bay
CC − Central Coast
SC − South Coast
SR − Sacramento River
SJ − San Joaquin
TL − Tulare Lake
NL − North Lahontan
SL − South Lahontan
CR − Colorado River−Desert

WATER YEAR IS OCTOBER 1 THROUGH SEPTEMBER 30

DEPARTMENT OF WATER RESOURCES
CALIFORNIA COOPERATIVE SNOW SURVEYS
FORECAST OF APRIL – JULY
UNIMPAIRED SNOWMELT RUNOFF
May 1, 2006



* FORECAST BY DEPARTMENT OF WATER AND POWER, CITY OF LOS ANGELES

MAY 1, 2006 FORECASTS
APRIL-JULY UNIMPAIRED RUNOFF

HYDROLOGIC REGION and Watershed	Unimpaired Runoff in 1,000 Acre-Feet (1) HISTORICAL 50 Yr Avg (2)	Max of Record	Min of Record	FORECAST Apr-Jul Forecasts	Pct of Avg	80 % Probability Range (1)
SACRAMENTO RIVER						
Upper Sacramento River						
Sacramento River at Delta above Shasta Lake (3)	299	711	39	580	194%	
McCloud River above Shasta Lake	400	850	185	740	185%	
Pit River near Montgomery Creek + Squaw Creek	1,090	2,098	480	1,740	160%	
Total Inflow to Shasta Lake	1,849	3,525	726	**3,460**	187%	3,240 - 3,790
Sacramento River above Bend Bridge, near Red Bluff	2,521	5,075	943	**4,950**	196%	4,630 - 5,440
Feather River						
Feather River at Lake Almanor near Prattville (3)	333	675	120	530	159%	
North Fork at Pulga (3)	1,028	2,416	243	1,770	172%	
Middle Fork near Clio (4)	86	518	4	160	186%	
South Fork at Ponderosa Dam (3)	110	267	13	210	191%	
Feather River at Oroville	1,870	4,676	392	**3,370**	180%	3,100 - 3,770
Yuba River						
North Yuba below Goodyears Bar (3)	286	647	51	510	178%	
Inflow to Jackson Mdws and Bowman Reservoirs (3)	112	236	25	185	165%	
South Yuba at Langs Crossing (3)	233	481	57	360	155%	
Yuba River near Smartville plus Deer Creek	1,044	2,424	200	**1,900**	182%	1,725 - 2,060
American River						
North Fork at North Fork Dam (3)	262	716	43	490	187%	
Middle Fork near Auburn (3)	522	1,406	100	1,010	193%	
Silver Creek Below Camino Diversion Dam (3)	173	386	37	330	191%	
American River below Folsom Lake	1,282	3,074	229	**2,440**	190%	2,300 - 2,640
SAN JOAQUIN RIVER						
Cosumnes River at Michigan Bar	130	363	8	**430**	332%	400 - 460
Mokelumne River						
North Fork near West Point (5)	437	829	104	710	162%	
Total Inflow to Pardee Reservoir	469	1,065	102	**820**	175%	780 - 890
Stanislaus River						
Middle Fork below Beardsley Dam (3)	334	702	64	610	183%	
North Fork Inflow to McKays Point Dam (3)	224	503	34	410	183%	
Stanislaus River below Goodwin Reservoir (7)	716	1,710	116	**1,310**	183%	1,240 - 1,410
Tuolumne River						
Cherry Creek & Eleanor Creek near Hetch Hetchy (3)	322	727	97	530	165%	
Tuolumme River near Hetch Hetchy (3)	606	1,392	153	1,030	170%	
Tuolumne River below La Grange Reservoir (7)	1,230	2,682	301	**2,150**	175%	2,060 - 2,300
Merced River						
Merced River at Pohono Bridge (3)	362	888	80	650	180%	
Merced River below Merced Falls (7)	633	1,587	123	**1,140**	180%	1,090 - 1,240
San Joaquin River						
San Joaquin River at Mammoth Pool (6)	1,014	2,279	235	1,700	168%	
Big Creek below Huntington Lake (6)	95	264	11	170	179%	
South Fork near Florence Lake (6)	202	511	58	330	163%	
San Joaquin River inflow to Millerton Lake	1,262	3,355	262	**2,180**	173%	2,080 - 2,350
TULARE LAKE						
Kings River						
North Fork Kings River near Cliff Camp (3)	239	565	50	410	172%	
Kings River below Pine Flat Reservoir	1,234	3,113	274	**2,080**	169%	1,980 - 2,180
Kaweah River below Terminus Reservoir	290	814	62	**480**	166%	455 - 520
Tule River below Lake Success	65	259	2	**125**	193%	119 - 139
Kern River						
Kern River near Kernville (3)	373	1,203	83	570	153%	
Kern River inflow to Lake Isabella	470	1,657	84	**700**	149%	670 - 750

(1) See inside back cover for definition
(2) All 50 year averages are based on years 1951-2000 unless otherwise noted
(3) 50 year average based on years 1941-90
(4) 44 year average based on years 1936-79
(5) 36 year average based on years 1936-72
(6) 45 year average based on years 1936-81

MAY 1, 2006 FORECASTS
WATER YEAR UNIMPAIRED RUNOFF

Unimpaired Runoff in 1,000 Acre-Feet (1)

HISTORICAL			DISTRIBUTION								FORECAST		
50 Yr Avg (2)	Max of Record	Min of Record	Oct Thru Jan*	Feb *	Mar *	Apr *	May	Jun	Jul	Aug & Sep	Water Year Forecasts	Pct of Avg	80 % Probability Range (1)
888	1,965	165											
1,234	2,353	557											
3,217	5,150	1,484											
6,194	10,796	2,479	3,125	825	1,380	1,750	840	530	340	540	**9,330**	151%	9,040 - 9,725
8,990	17,180	3,294	5,125	1,335	2,130	2,810	1,070	650	420	640	**14,180**	158%	13,760 - 14,780
780	1,269	366											
2,417	4,400	666											
219	637	24											
291	562	32											
4,775	9,492	994	2,625	725	1,130	1,705	950	490	225	235	**8,085**	169%	7,745 - 8,545
564	1,056	102											
181	292	30											
379	565	98											
2,459	4,926	369	1,435	405	495	815	630	350	105	70	**4,305**	175%	4,105 - 4,490
616	1,234	66											
1,070	2,575	144											
318	705	59											
2,830	6,382	349	1,515	475	645	1,255	690	400	95	90	**5,165**	183%	4,990 - 5,400
409	1,253	20	208	60	159	315	85	20	10	3	**860**	210%	825 - 895
626	1,009	197											
774	1,800	129	280	85	140	290	270	220	40	20	**1,345**	174%	1,300 - 1,430
471	929	88											
1,196	2,952	155	445	135	240	480	430	300	100	50	**2,180**	182%	2,080 - 2,290
461	1,147	123											
770	1,661	258											
1,974	4,631	383	530	150	300	610	680	660	200	100	**3,230**	164%	3,110 - 3,410
461	1,020	92											
1,014	2,787	150	210	75	170	345	370	330	95	50	**1,645**	162%	1,570 - 1,770
1,337	2,964	308											
112	298	14											
248	653	71											
1,851	4,642	362	315	110	200	495	680	660	345	170	**2,975**	161%	2,820 - 3,190
284	607	58											
1,736	4,287	386	245	80	155	400	660	680	340	160	**2,720**	157%	2,610 - 2,830
460	1,402	94	77	26	61	140	170	130	40	24	**668**	145%	640 - 720
153	615	16	32	7	31	69	35	15	6	5	**200**	131%	190 - 215
558	1,577	163											
741	2,318	175	125	35	60	145	240	225	90	70	**990**	134%	950 - 1,050

* Unimpaired runoff in prior months based on measured flows

(7) Forecast point names based on USGS gage names. Stanislaus below Goodwin also known as inflow to New Melones, Tuolumne River below La Grange also known as inflow to Don Pedro, Merced River below Merced Falls also known as inflow to McClure.

MAY 1, 2006 FORECASTS
APRIL-JULY UNIMPAIRED RUNOFF

HYDROLOGIC REGION and Watershed	Apr-Jul Unimpaired Runoff in 1,000 Acre-Feet (1) HISTORICAL 50 Yr Avg (2)	Max of Record	Min of Record	FORECAST Apr-Jul Forecasts	Pct of Avg
NORTH COAST					
Trinity River					
Trinity River at Lewiston Lake (3)	660	1,593	80	**1,200**	182%
Scott River					
Scott River near Fort Jones	200	400	30	**320**	160%
Klamath River					
Total inflow to Upper Klamath Lake (4)	515	939	149	**835**	162%
NORTH LAHONTAN					
Truckee River					
Lake Tahoe to Farad accretions	272	713	52	**425**	156%
Lake Tahoe Rise (assuming gates closed, in ft)	1.4	5.4	0.2	**2.3**	159%
Carson River					
West Fork Carson River at Woodfords	55	135	12	**90**	161%
East Fork Carson River near Gardnerville	190	407	43	**330**	173%
Walker River					
West Walker River below Little Walker, near Coleville	153	330	35	**270**	176%
East Walker River near Bridgeport	65	209	7	**140**	214%
SOUTH LAHONTAN					
Owens River					
Total tributary flow to Owens River (5)	235	579	96	**328**	140%

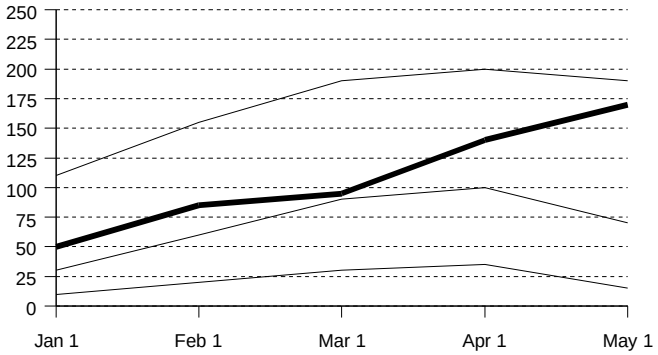
MAY 1, 2006 FORECASTS
WATER YEAR UNIMPAIRED RUNOFF

HYDROLOGIC REGION and Watershed	Water Year Unimpaired Runoff in 1,000 Acre-Feet (1) HISTORICAL 50 Yr Avg (2)	Max of Record	Min of Record	FORECAST Water Year Forecasts	Pct of Avg	80 % Probability Range (1)
NORTH COAST						
Trinity River						
Trinity River at Lewiston Lake (3)	1,411	2,990	200	**2,320**	164%	2210 - 2460

(1) See inside back cover for definition
(2) All 50 year averages are based on years 1951-2000 unless otherwise noted
(3) Forecast by DWR and National Weather Service California-Nevada River Forecast Center.
(4) Forecast by U.S. Natural Resources Conservation Service and National Weather Service California-Nevada River Forecast Center, April through September forecast, 30 year average based on years 1971-2000.
(5) Forecast by Department of Water and Power, City of Los Angeles, average based on years 1951-2000.

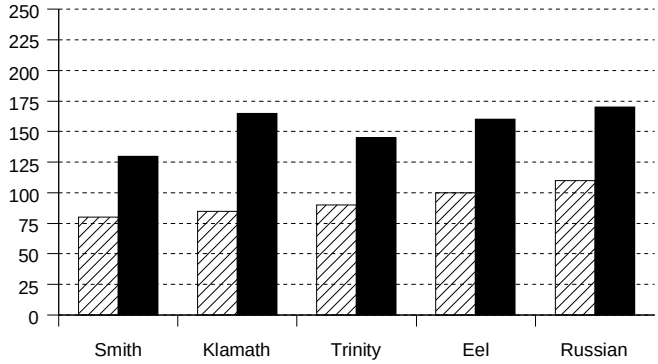
Snowpack Accumulation

Water Content in % of April 1 Average



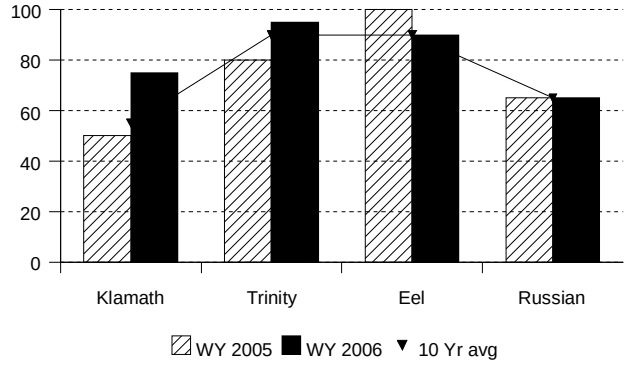
Precipitation

October 1 to date in % of Average



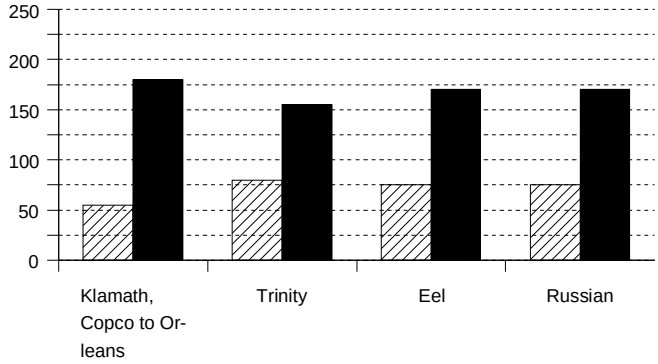
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



NORTH COAST REGION

SNOWPACK- First of the month measurements made at 10 snow courses indicate an area wide snow water equivalent of 55 inches. This is 170 percent of the seasonal April 1 average and 240% of the May 1 average. Last year at this time the pack was holding 30.4 inches of water.

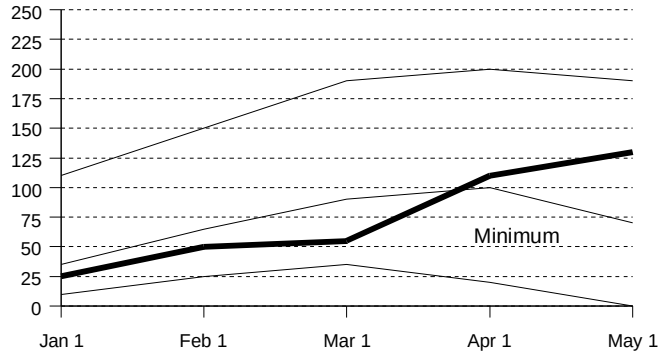
PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on this area was 155 percent of normal. Precipitation last month was about 185 percent of the monthly average. Seasonal precipitation at this time last year stood at 95 percent of normal.

RESERVOIR STORAGE- First of the month storage in 6 reservoirs was 2.8 million acre-feet which is 115 percent of average. About 90 percent of available capacity was being used. Storage in these reservoirs at this time last year was 100 percent of average.

RUNOFF -Seasonal runoff of streams draining the area totaled 19.7 million acre-feet which is 170 percent of the average for this period. Last year, runoff for the same period was 70 percent of average.

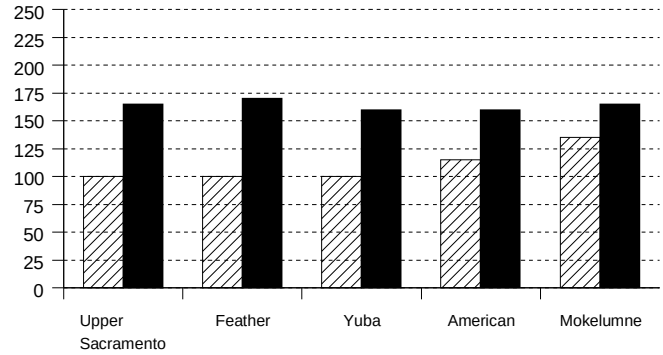
Snowpack Accumulation

Water Content in % of April 1 Average



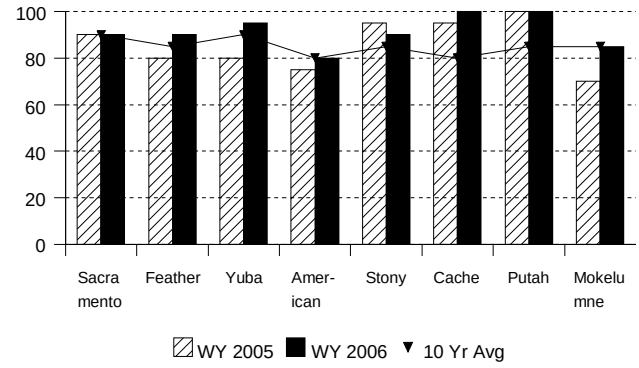
Precipitation

October 1 to date in % of Average



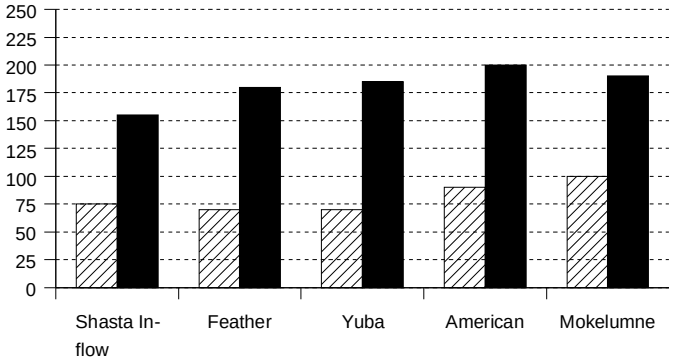
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



SACRAMENTO RIVER REGION

SNOWPACK- First of the month measurements made at 67 snow courses indicate an area wide snow water equivalent of 41.7 inches. This is 130 percent of the seasonal April 1 average and 180 percent of the May 1 average. Last year at this time the pack was holding 33.1 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on this area was 160 percent of normal. Precipitation last month was about 305 percent of the monthly average. Seasonal precipitation at this time last year stood at 110 percent of normal.

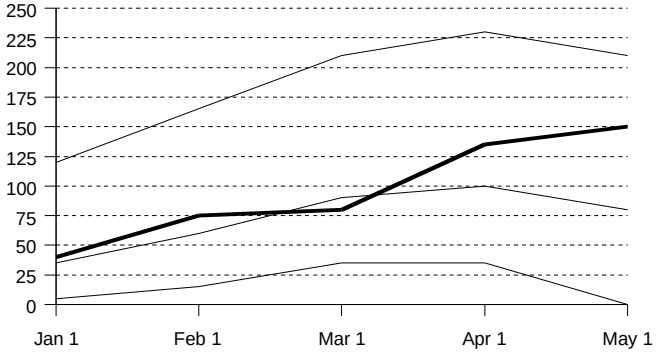
RESERVOIR STORAGE- First of the month storage in 43 reservoirs was 14.5 million acre-feet which is 110 percent of average. About 90 percent of available capacity was being used. Storage in these reservoirs at this time last year was 105 percent of average.

RUNOFF - Seasonal runoff of streams draining the area totaled 24.6 million acre-feet which is 175 percent of average for this period. Last year, runoff for the same period was 75 percent of average.

The **Sacramento Region 40-30-30 Water Supply Index** is forecast to be 13.0 assuming median meteorological conditions for the remainder of the year. This classifies the year as " wet" in the Sacramento Valley according to the State Water Resources Control Board.

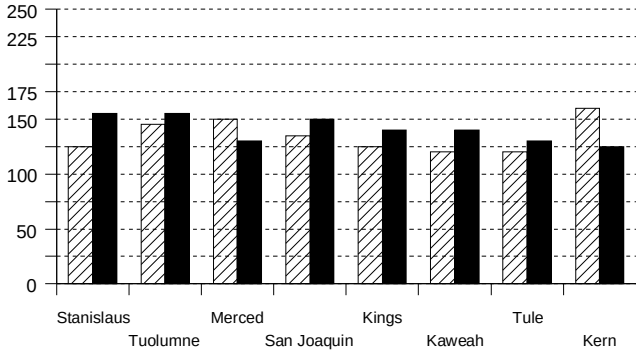
Snowpack Accumulation

Water Content in % of April 1 Average



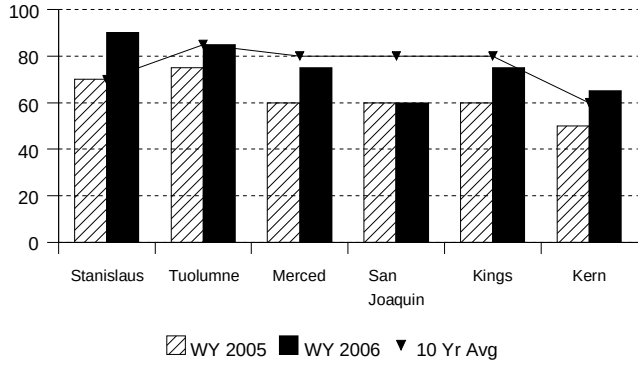
Precipitation

October 1 to date in % of Average



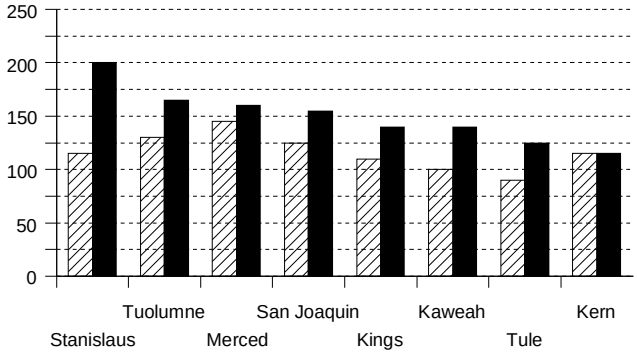
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



SAN JOAQUIN RIVER AND TULARE LAKE REGIONS

SNOWPACK- First of the month measurements made at 58 **San Joaquin Region** snow courses indicate an area wide snow water equivalent of 51.4 inches. This is 155 percent of the seasonal (April 1) average and 185 percent of the May 1 average. Last year at this time the pack was holding 48.5 inches of water. At the same time 37 **Tulare Lake Region** snow courses indicated a basin-wide snow water equivalent of 34.9 inches which is 140 percent of the average for April 1 and 180 percent of May 1. Last year at this time the basin was holding 32.4 inches of water.

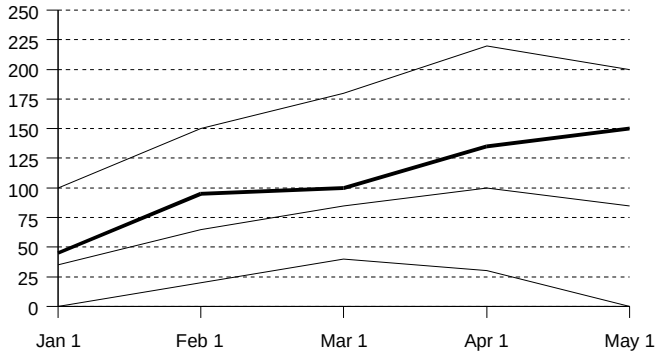
PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **San Joaquin Region** was 145 percent of normal. Precipitation last month was about 320 percent of the monthly average. Seasonal precipitation at this time last year stood at 140 percent of normal. Seasonal precipitation on the **Tulare Lake Region** was 130 percent of normal. Precipitation last month was about 300 percent of the monthly average. Seasonal precipitation at this time last year stood at 135 percent of normal.

RESERVOIR STORAGE- First of the month storage in 34 **San Joaquin Region** reservoirs was 9.7 million acre-feet which is 125 percent of average. About 85 percent of available capacity was being used. Storage in these reservoirs at this time last year was 110 percent of average. First of the month storage in 6 **Tulare Lake Region** reservoirs was 1.5 million acre-feet which is 145 percent of average and about 75 percent of available capacity. Storage in these reservoirs at this time last year was 110 percent of average.

RUNOFF- Seasonal runoff of streams draining the **San Joaquin Region** totaled 6.3 million acre-feet which is 175 percent of average for this period. Last year, runoff for the same period was 125 percent of average. Seasonal runoff of streams draining the **Tulare Lake Basin** totaled 1.7 million acre-feet which is 130 percent of average for this period. Last year runoff for this same period was 110 percent of average. The **San Joaquin Region 60-20-20 Water Supply Index** is forecast to be 5.6 assuming median meteorological conditions. This classifies the year as "wet" in the San Joaquin River Region according to the State Water Resources Control Board.

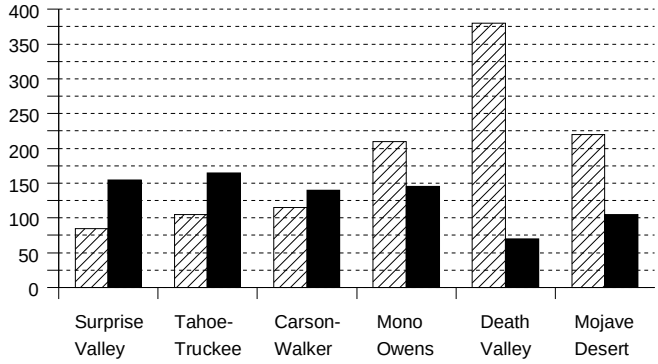
Snowpack Accumulation

Water Content in % of April 1 Average



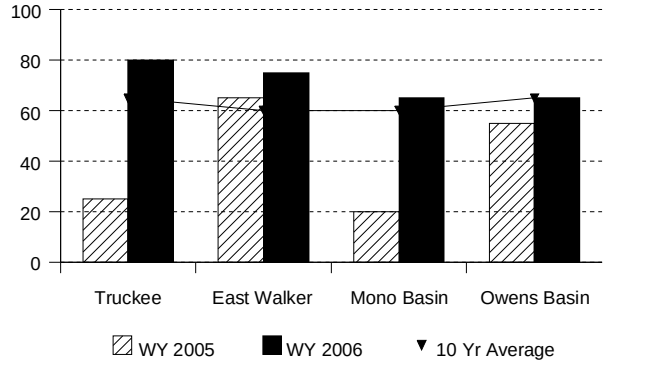
Precipitation

October 1 to date in % of Average



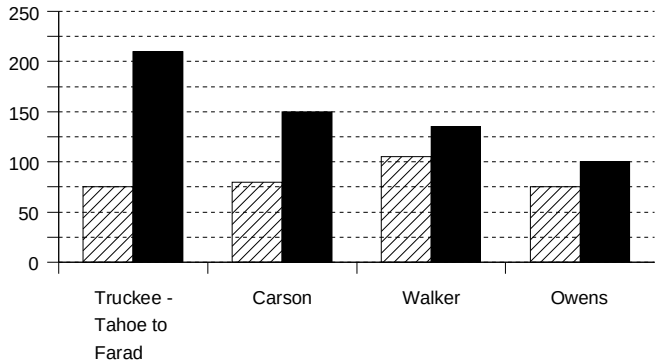
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



NORTH AND SOUTH LAHONTAN REGIONS

SNOWPACK- First of the month measurements made at 5 **North Lahontan Region** snow courses indicate an area wide snow water equivalent of 35.2 inches. This is 145 percent of the seasonal (April 1) average and 170 percent of the May 1 average. Last year at this time the pack was holding 24.9 inches of water. At the same time 2 **South Lahontan** snow courses indicated a basin-wide snow water equivalent of 20.1 inches which is 155 percent of the seasonal (April 1) average and 180 percent of the May 1 average. Last year at this time the basin was holding 18.5 inches of water.

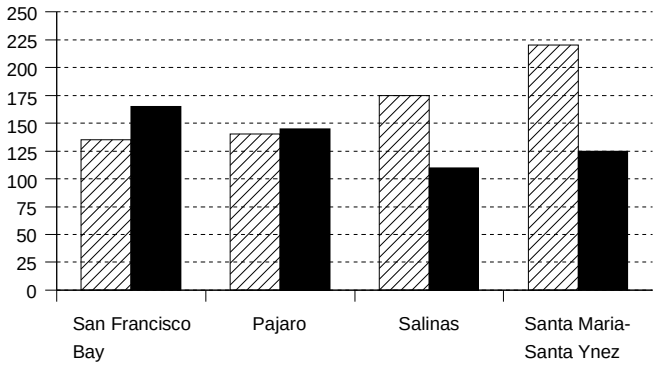
PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **North Lahontan Region** was 155 percent of normal. Precipitation last month was about 270 percent of the monthly average. Seasonal precipitation at this time last year stood at 100 percent of normal. Seasonal precipitation on the **South Lahontan** was 105 percent of normal. Precipitation last month was about 190 percent of the monthly average. Seasonal precipitation at this time last year stood at 270 percent of normal.

RESERVOIR STORAGE- First of the month storage in 5 **North Lahontan** reservoirs was 845 thousand acre-feet which is 135 percent of average. About 80 percent of available capacity was being used. Storage in these reservoirs at this time last year was 45 percent of average. Lake Tahoe was 4.6 feet above its natural rim on May 1. First of the month storage in 8 **South Lahontan** reservoirs was 283 thousand acre-feet which is 110 percent of average and about 70 percent of available capacity. Storage in these reservoirs at this time last year was 90 percent of average.

RUNOFF- Seasonal runoff of streams draining the **North Lahontan Region** totaled 781 thousand acre-feet which is 175 percent of average for this period. Last year, runoff for the same period was 80 percent of average. Seasonal runoff of the Owens River in the **South Lahontan** totaled 78 thousand acre-feet which is 100 percent of average for this period. Last year runoff for this same period was 75 percent of average.

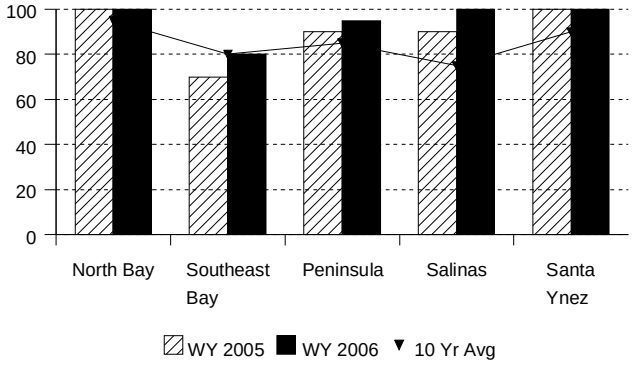
Precipitation

October 1 to date in % of Average



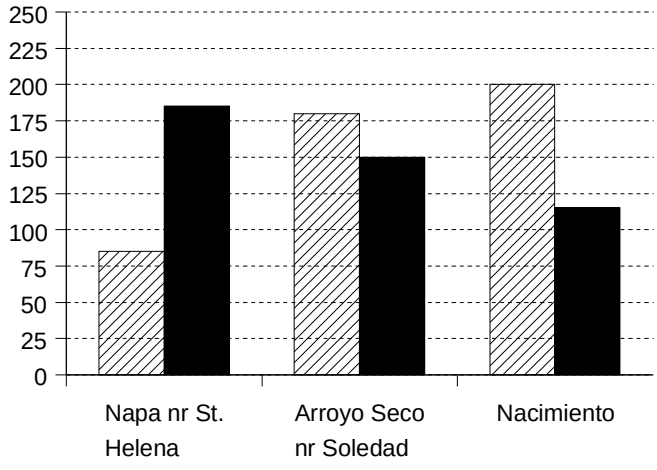
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



SAN FRANCISCO BAY AND CENTRAL COAST REGIONS

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **San Francisco Bay Region** was 165 percent of normal. Precipitation last month was about 315 percent of the monthly average. Seasonal precipitation at this time last year stood at 135 percent of normal.

Seasonal precipitation on the **Central Coast Region** was 125 percent of normal. Precipitation last month was about 315 percent of the monthly average. Seasonal precipitation at this time last year stood at 180 percent of normal.

RESERVOIR STORAGE- First of the month storage in 14 **San Francisco Bay Region** reservoirs was 462 thousand acre-feet which is 115 percent of average. About 85 percent of available capacity was being used. Storage in these reservoirs at this time last year was 105 percent of average.

First of the month storage in 6 **Central Coast Region** reservoirs was 969 thousand acre-feet which is 135 percent of average and about 100 percent of available capacity. Storage in these reservoirs at this time last year was 125 percent of average.

RUNOFF- Seasonal runoff of the Napa River in the **San Francisco Bay Region** totaled 136 thousand acre-feet which is 185 percent of average for this period. Last year, runoff for the same period was 85 percent of average.

Seasonal runoff of streams draining the **Central Coast Region** totaled 406 thousand acre-feet which is 130 percent of average for this period. Last year runoff for this same period was 195 percent of average.

SOUTH COAST AND COLORADO RIVER REGIONS

PRECIPITATION - October through April (seasonal) precipitation on the **South Coast Region** was 70 percent of normal. April precipitation was 185 percent of the monthly average. Seasonal precipitation at this time last year was 220 percent of normal. Seasonal precipitation on the **Colorado River-Desert Region** was 45 percent of normal. Precipitation during April was 70 percent of average. Seasonal precipitation at this time last year stood at 295 percent of average.

RESERVOIR STORAGE - May 1 storage in 29 major **South Coast Region** reservoirs was 1.6 million acre-feet or 105 percent of average. About 80 percent of available capacity was being used. Storage in these reservoirs at this time last year was 90 percent of average.
On May 1 combined storage in Lakes Powell, Mead, Mohave and Havasu was about 28.3 million acre-feet or about 67 percent of average. About 53 percent of available capacity was in use. Last year at this time, these reservoirs were storing 65 percent of average.

RUNOFF - Seasonal runoff from selected **South Coast Region** streams totaled 51 thousand acre-feet which is 110 percent of average. Seasonal runoff from these streams last year was 280 percent of average.

COLORADO RIVER

The April July inflow to Lake Powell is forecast to be 6.8 million acre-feet, which is 86 percent of average. The May 1 snowpack in the Colorado River basin above Lake Powell was 65 percent of average, highest in the Duchesne River at 90 percent and lowest in the Dolores/San Miguel at 25 percent.

CENTRAL VALLEY PROJECT

As of April 30, 2006, CVP storage was 10.3 million acre-feet, which is an increase of 0.7 million acre-feet compared to one year ago and is approximately 112% of normal for that date. The Bureau of Reclamation announced updated water year 2006 supply allocations for the CVP contractors on April 20, 2006. Based on a conservative water supply forecast prepared from information available April 1, 2006, and a water year inflow into Shasta Reservoir of 7.8 million acre-feet, CVP water supplies were: Agricultural contractors North of Delta 100% and South of Delta 85%; Urban contractors North of Delta 100% and South of Delta 100%; Sacramento River water rights and San Joaquin Exchange contractors 100%; Wildlife Refuges 100%; Eastside Division contractors (Stanislaus River) projected to be 155,000 acre-feet; Friant Division contractors 100% Class 1 and Uncontrolled Season for Class 2. Updated allocations will be announced in mid-May.

The forecast of CVP operations is available on the Mid-Pacific Region's website at http://www.usbr.gov/mp.

MAJOR WATER DISTRIBUTION PROJECTS

RESERVOIR STORAGE

(AVERAGES BASED ON 1951-2000 OR PERIOD RECORD)

RESERVOIR	CAPACITY 1,000 AF	AVERAGE STORAGE 1,000 AF	STORAGE AT END OF April 2005 1,000 AF	2006 1,000 AF	PERCENT AVERAGE	PERCENT CAPACITY
STATE WATER PROJECT						
Lake Oroville	3,538	2,967	2,842	3,137	106%	89%
San Luis Reservoir (SWP)	1,062	983	933	1,059	108%	100%
Lake Del Valle	77	39	41	41	106%	54%
Lake Silverwood	73	68	72	69	101%	94%
Pyramid Lake	171	163	163	167	102%	98%
Castaic Lake	325	286	318	317	111%	97%
Perris Lake	132	117	125	71	60%	54%
CENTRAL VALLEY PROJECT						
Trinity Lake	2,448	2,045	1,969	2,338	114%	96%
Lake Shasta	4,552	3,950	4,207	4,057	103%	89%
Whiskeytown Lake	241	231	238	238	103%	99%
Folsom Lake	977	728	830	766	105%	78%
New Melones Reservoir	2,420	1,446	1,678	2,208	153%	91%
Millerton Lake	520	352	414	328	93%	63%
San Luis Reservoir (CVP)	971	880	965	965	110%	99%
COLORADO RIVER PROJECT						
Lake Mead	26,159	20,374	15,869	14,966	73%	57%
Lake Powell	24,322	19,267	8,538	11,093	58%	46%
Lake Mohave	1,810	1,672	1,709	1,666	100%	92%
Lake Havasu	619	588	586	558	95%	90%
EAST BAY MUNICIPAL UTILITY DISTRICT						
Pardee Res	198	182	187	198	109%	100%
Camanche Reservoir	417	258	373	355	138%	85%
East Bay (4 res.)	147	136	130	133	98%	90%
CITY AND COUNTY OF SAN FRANCISCO						
Hetch-Hetchy Reservoir	360	157	184	198	126%	55%
Cherry Lake	268	145	226	213	147%	80%
Lake Eleanor	26	15	24	26	178%	101%
South Bay/Peninsula (4 res.)	225	182	158	185	102%	82%
CITY OF LOS ANGELES (D.W.P.)						
Lake Crowley	183	124	122	137	111%	75%
Grant Lake	48	26	17	44	170%	92%
Other Aqueduct Storage (6 res.)	95	75	37	45	60%	47%

TELEMETERED SNOW WATER EQUIVALENTS

May 1, 2006

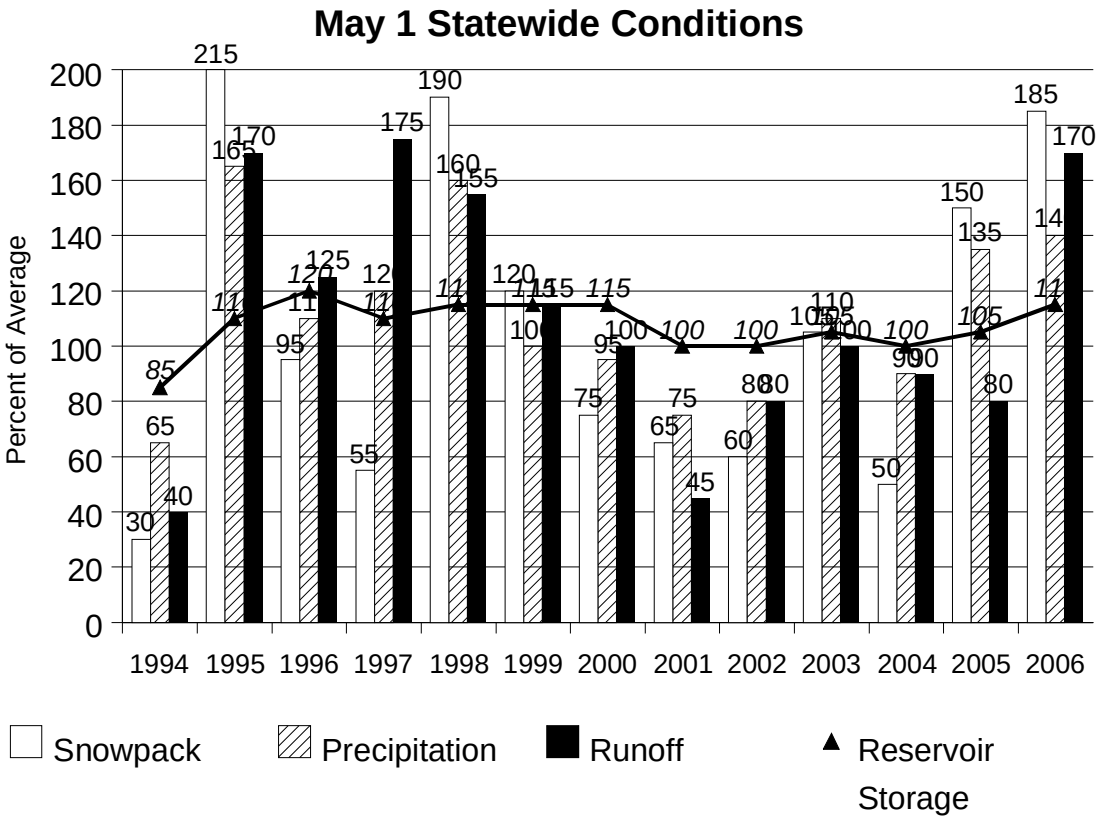
(AVERAGES BASED ON PERIOD RECORD)

BASIN NAME / STATION NAME	ELEV	APRIL 1 AVERAGE	INCHES OF WATER EQUIVALENT May 1	PERCENT OF AVERAGE	24 HRS PREVIOUS	1 WEEK PREVIOUS
TRINITY RIVER						
Peterson Flat	7150’	29.2	38.8	132.9	39.2	44.5
Red Rock Mountain	6700’	39.6	68.2	172.2	69.7	76.5
Bonanza King	6450’	40.5	—	—	—	—
Shimmy Lake	6400’	40.3	—	—	—	—
Middle Boulder 3	6200’	28.3	57.0	201.4	58.8	64.0
Highland Lakes	6030’	29.9	63.2	211.4	64.4	69.4
Scott Mountain	5900’	16.0	46.9	293.2	48.1	52.9
Mumbo Basin	5650’	22.4	52.6	234.6	53.3	57.2
Big Flat	5100’	15.8	27.0	170.9	27.9	33.2
Crowder Flat	5100’	—	0.0	—	0.0	0.0
SACRAMENTO RIVER						
Cedar Pass	7100’	18.1	17.0	93.9	17.7	22.4
Blacks Mountain	7050’	12.7	11.9	93.5	13.0	17.8
Sand Flat	6750’	42.4	66.1	155.9	66.8	69.0
Medicine Lake	6700’	32.6	56.3	172.6	56.8	59.2
Adin Mountain	6200’	13.6	10.5	77.2	11.2	16.7
Snow Mountain	5950’	27.0	51.1	189.3	52.1	58.8
Slate Creek	5700’	29.0	—	—	—	—
Stouts Meadow	5400’	36.0	69.3	192.5	71.0	78.2
FEATHER RIVER						
Kettle Rock	7300’	25.5	34.4	134.9	35.2	38.4
Grizzly Ridge	6900’	29.7	35.0	118.0	35.8	39.2
Pilot Peak	6800’	52.6	48.0	91.3	49.0	56.0
Gold Lake	6750’	36.5	43.9	120.3	45.1	49.4
Humbug	6500’	28.0	—	—	—	—
Rattlesnake	6100’	14.0	25.7	183.4	26.8	32.9
Bucks Lake	5750’	44.7	62.2	139.1	63.1	65.6
Four Trees	5150’	20.0	32.4	162.0	34.3	41.8
EEL RIVER						
Noel Spring	5100’	—	0.0	—	0.7	9.7
YUBA & AMERICAN RIVERS						
Lake Lois	8600’	39.5	56.2	142.3	56.9	61.3
Schneiders	8750’	34.5	81.1	235.0	82.0	83.8
Carson Pass	8353’	—	—	—	—	—
Caples Lake	8000’	30.9	43.2	139.7	43.8	48.7
Alpha	7600’	35.9	42.4	118.2	43.5	48.0
Meadow Lake	7200’	55.5	—	—	—	—
Silver Lake	7100’	22.7	34.4	151.6	35.4	41.2
Central Sierra Snow Lab	6900’	33.6	46.0	136.9	47.6	54.9
Huysink	6600’	42.6	38.5	90.4	39.4	42.7
Van Vleck	6700’	35.9	43.6	121.4	44.9	51.6
Robbs Saddle	5900’	21.4	26.0	121.5	27.3	34.1
Greek Store	5600’	21.0	31.6	150.3	32.6	37.4
Blue Canyon	5280’	9.0	16.5	183.3	17.0	25.9
Robbs Powerhouse	5150’	5.2	8.3	159.6	9.9	17.2
MOKELUMNE & STANISLAUS RIVERS						
Deadman Creek	9250’	37.2	39.5	106.1	39.7	39.8
Highland Meadow	8700’	47.9	67.5	140.9	68.5	70.9
Gianelli Meadow	8400’	55.5	76.1	137.0	77.0	79.1
Lower Relief Valley	8100’	41.2	69.9	169.6	70.8	74.4
Blue Lakes	8000’	33.1	42.6	128.7	43.0	44.3
Mud Lake	7900’	44.9	68.9	153.4	69.5	71.3
Stanislaus Meadow	7750’	47.5	72.3	152.3	73.4	78.1
Bloods Creek	7200’	35.5	31.6	88.9	32.8	40.0
Black Springs	6500’	32.0	36.3	113.3	36.6	37.9
TUOLUMNE & MERCED RIVERS						
Tioga Pass Entrance	9945’	—	—	—	—	—
Dana Meadows	9800’	27.7	35.1	126.7	35.8	39.2
Slide Canyon	9200’	41.1	63.4	154.3	64.2	66.5
Lake Tenaya	8150’	33.1	48.4	146.2	48.5	49.0
Tuolumne Meadows	8600’	22.6	28.4	125.8	29.3	34.5
Horse Meadow	8400’	48.6	72.5	149.2	73.5	77.4
Ostrander Lake	8200’	34.8	52.5	150.9	53.5	56.2
Paradise Meadow	7650’	41.3	49.0	118.6	50.5	58.2
Gin Flat	7050’	34.2	24.1	70.6	24.9	28.2
Lower Kibbie Ridge	6700’	27.4	15.7	57.4	16.8	23.9

SAN JOAQUIN RIVER						
Volcanic Knob	10050’	30.1	40.5	134.7	41.9	45.8
Agnew Pass	9450’	32.3	27.7	85.7	29.0	30.9
Kaiser Point	9200’	37.8	58.6	155.1	59.0	59.0
Green Mountain	7900’	30.8	44.3	143.8	45.0	48.6
Tamarack Summit	7550’	30.5	41.8	136.9	42.7	47.2
Chilkoot Meadow	7150’	38.0	44.0	115.8	44.9	48.0
Huntington Lake	7000’	20.1	24.6	122.4	25.4	28.1
Graveyard Meadow	6900’	18.8	24.7	131.5	25.6	29.2
Poison Ridge	6900’	28.9	—	—	—	—
KINGS RIVER						
Bishop Pass	11200’	34.0	45.9	135.0	46.1	46.2
Charlotte Lake	10400’	27.5	43.0	156.4	43.9	46.2
State Lakes	10300’	29.0	—	—	—	—
Mitchell Meadow	9900’	32.9	—	—	—	—
Blackcap Basin	10300’	34.3	50.5	147.2	51.0	52.3
Upper Burnt Corral	9700’	34.6	53.5	154.6	54.0	54.9
West Woodchuck Meadow	9100’	32.8	54.9	167.4	55.3	57.0
Big Meadows	7600’	25.9	36.7	141.8	38.0	43.6
KAWEAH & TULE RIVERS						
Farewell Gap	9500’	34.5	63.7	184.6	65.7	73.3
Quaking Aspen	7200’	21.0	18.2	86.9	19.1	22.8
Giant Forest	6650’	10.0	12.9	129.0	14.0	18.4
KERN RIVER						
Upper Tyndall Creek	11400’	27.7	31.0	111.9	31.8	30.1
Crabtree Meadow	10700’	19.8	24.6	124.2	25.2	25.8
Chagoopa Plateau	10300’	21.8	25.0	114.5	25.7	26.5
Pascoes	9150’	24.9	34.9	140.2	35.7	38.0
Tunnel Guard Station	8900’	15.6	7.5	48.1	8.8	14.6
Wet Meadows	8950’	30.3	—	—	—	—
Casa Vieja Meadows	8300’	20.9	27.3	130.6	27.9	31.5
Beach Meadows	7650’	11.0	0.0	0.0	0.0	3.0
SURPRISE VALLEY AREA						
Dismal Swamp	7050’	29.2	44.5	152.4	45.7	50.0
TRUCKEE RIVER						
Mount Rose Ski Area	8900’	38.5	71.9	186.8	72.4	73.3
Independence Lake	8450’	41.4	65.4	158.0	65.8	66.4
Big Meadows	8700’	25.7	32.7	127.2	33.8	36.8
Squaw Valley	8200’	46.5	85.5	183.9	86.5	88.2
Independence Camp	7000’	21.8	14.0	64.2	14.8	18.1
Independence Creek	6500’	12.7	3.4	26.8	4.2	8.8
Truckee 2	6400’	14.3	8.9	62.2	10.2	15.7
LAKE TAHOE BASIN						
Heavenly Valley	8800’	28.1	39.8	141.6	40.6	42.9
Hagans Meadow	8000’	16.5	22.0	133.3	23.1	27.8
Marlette Lake	8000’	21.1	32.6	154.5	33.7	38.5
Echo Peak 5	7800’	39.5	55.5	140.5	57.3	63.3
Rubicon Peak 2	7500’	29.1	35.9	123.4	36.6	39.2
Tahoe City Cross	6750’	16.0	4.9	30.6	6.0	10.7
Ward Creek 3	6750’	39.4	44.8	113.7	46.3	53.1
Fallen Leaf Lake	6250’	7.0	0.0	0.0	0.0	0.0
CARSON RIVER						
Ebbetts Pass	8700’	38.8	64.0	164.9	64.0	64.0
Horse Meadow	8557’	—	37.6	—	38.5	39.2
Burnside Lake	8129’	—	37.0	—	38.0	41.5
Forestdale Creek	8017’	—	—	—	—	—
Poison Flat	7900’	16.2	16.3	100.6	17.1	21.2
Monitor Pass	8350’	—	19.9	—	20.7	25.8
Spratt Creek	6150’	4.5	0.0	0.0	0.0	0.0
WALKER RIVER						
Leavitt Lake	9600’	—	100.3	—	100.3	99.7
Summit Meadow	9313’	—	47.2	—	48.0	51.5
Virginia Lakes	9300’	20.3	33.9	167.0	34.4	35.0
Lobdell Lake	9200’	17.3	27.7	160.1	28.8	32.5
Sonora Pass Bridge	8750’	26.0	36.1	138.8	37.2	39.0
Leavitt Meadows	7200’	8.0	0.0	0.0	0.0	5.1
OWENS RIVER/MONO LAKE						
Gem Pass	10750’	31.7	61.4	193.7	61.9	62.3
Sawmill	10200’	19.4	22.3	114.9	23.0	24.8
Cottonwood Lakes	10150’	11.6	19.6	169.3	20.6	22.0
Big Pine Creek	9800’	17.9	—	—	—	—
South Lake	9600’	16.0	27.6	172.5	28.3	31.1
Mammoth Pass	9300’	42.4	66.6	157.1	67.1	67.2
Rock Creek Lakes	10000’	14.0	29.0	207.0	30.2	30.5

NORMAL SNOWPACK ACCUMULATION EXPRESSED AS A PERCENT OF APRIL 1ST AVERAGE

AREA	JANUARY	FEBRUARY	MARCH	APRIL	MAY
Central Valley North	45%	70%	90%	100%	75%
Central Valley South	45%	65%	85%	100%	80%
North Coast	40%	60%	85%	100%	80%



SNOWLINES

April provided a significant boost to the Spring snowpack. http://www.wrh.noaa.gov/cnrfc/snowmelt.pdf has the latest 5 to 20 day spring snowmelt forecasts along with the day on which a river peaked.

On this month's cover is another view of the Phillips Station. This time in the 1930's.

This year begins the celebration of the pioneering work by Dr. James E. Church in the development of modern snow survey and water supply forecasting techniques.
http://www.sierrasun.com/article/20060428/LIFE/60427013 is one link to an article describing his work. The Natural Resource Conservation Service kicked off the festivities with a commemoration on May 2 near the Mt. Rose site and at the University of Nevada Reno. The UNR library is featuring a display of Church's work.

SNOWPACK- Snow data is a major index of spring and summer runoff from Sierra Nevada watersheds. April 1 data historically reflects the magnitude of the snowpack at or near the maximum seasonal accumulation. Averages are based on April 1 data for the period 1951-2000 (50 years, except for data sites established after 1951).

PRECIPITATION - Averages are based on April 1 data for the period 1951-2000 (50 years, except for data sites established after 1951).

RUNOFF AND FORECASTS - Runoff data and runoff forecasts are shown as unimpaired values. Unimpaired runoff represents the natural water production of a river basin, unaltered by upstream diversions, storage, or by export or import of water to or from other watersheds. Forecast of runoff assumes median conditions subsequent to the date of forecast.

Runoff probability ranges are statistically derived from historical data. The 80 percent probability range is comprised of the 90 percent exceedence level value and the 10 percent exceedence level value. This means that actual runoff should fall within the stated limits eight times out of ten.

Runoff averages for most streams are based on the period 1951-2000.

Reservoir storage averages are based on the period from 1951 (or beginning of operation) to 2000.

For more details contact California Cooperative Snow Surveys, P.O. Box 219000, Sacramento, CA 95821-9000, (916) 574-2635 or gridley@water.ca.gov.

INDICES OF WATER AVAILABILITY

The Sacramento River water year unimpaired runoff is the sum of: Sacramento River above Bend Bridge, Feather River Inflow to Lake Oroville, Yuba River near Smartville and American River Inflow to Folsom Lake.

The Sacramento Valley Water Year Hydrologic Classification (40-30-30 Index). The values 40-30-30 represent the percentage weight given to the three variables in the formula for the index. The first variable is the forecasted unimpaired runoff from April through July (40 percent). The second variable is the forecasted unimpaired runoff from October through March (30 Percent). The third variable is the previous year's index with a cap to account for required flood control releases during wet years. The basins used in this computation are those used in the Sacramento River water year unimpaired runoff.

The San Joaquin Valley Water Year Hydrologic Classification (60-20-20 Index). In a similar manner the values 60-20-20 represents the percentage weights on April through July runoff, October through March runoff and previous year's Index. The San Joaquin River unimpaired runoff is the sum of: Stanislaus River Inflow to New Melones Lake, Tuolumne River Inflow to New Don Pedro Reservoir, Merced River Inflow to Lake McClure and San Joaquin River Inflow to Millerton Lake.

Runoff of the eight major rivers of the Sacramento and San Joaquin Regions is the sum of the runoff in the eight major rivers used in the two above indices.

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First Class